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EXAMINER

FORMAN, BETTY J

ART UNIT	PAPER NUMBER
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1634

DATE MAILED: 12/12/2002

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/735,099

Applicant(s)

DAPPRICH ET AL.

Examiner

BJ Forman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-19 and 21 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s). <u>12 15</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____. |

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DETAILED ACTION

1. This action is in response to papers filed 14 June 2002 in which claims 1, 3, 4, 10, 14, 16, 18 and 19 were amended, claims 2 and 20 were canceled and claim 21 was added and papers filed 23 September 2002 in which claims 1 and 19 were amended. All of the amendments have been thoroughly reviewed and entered.

2. The sequence listing and computer readable form of the sequence listing submitted 11 July 2002 is acknowledged.

3. The previous rejections in the Office Action of Paper No. 5 dated 19 November 2001 are withdrawn in view of the amendments. The previous rejection under obviousness-type double patenting is withdrawn in view of Applicant's abandonment of Application 09/733,846. Applicant's arguments have been thoroughly reviewed but are deemed moot in view of the amendments, withdrawn rejections and new grounds for rejection. New grounds for rejection are discussed.

Claims 1, 3-19 and 21 are under prosecution.

Claim Objections

4. Claim 1, line 5 is objected to because "vicinity" is misspelled.
Appropriate correction is required.

Specification

5. The amendment filed 23 September 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall

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introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Independent Claims 1 and 19 have been amended to recite "a first identification step" and "a second identification step". The specification does teach or describe the newly claimed identification steps. Applicant points to page 7, lines 6-21 for support for the amendments. However, the cited passage merely describes targeting a particular polynucleotide; distinguishing between the targeted polynucleotide and other polynucleotides by attaching or removing a functional group; and separation of the target polynucleotide. The cited passage does not teach or describe a single identification step. As such, the amendment introduces new matter into the disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

35 U.S.C. 112: first paragraph

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1, 3-19, 21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The recitations "a first identification step" and "a second identification step" are added to the newly amended independent claims 1 and 19. The specification does teach or describe

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the newly claimed identification steps. Applicant points to page 7, lines 6-21 for support for the amendments. However, the cited passage merely describes targeting a particular polynucleotide; distinguishing between the targeted polynucleotide and other polynucleotides by attaching or removing a functional group; and separation of the target polynucleotide. The cited passage does not teach or describe a single identification step. Therefore, the specification fails to define or provide any disclosure to support such claim recitation.

MPEP 2163.06 notes "If NEW MATTER IS ADDED TO THE CLAIMS, THE EXAMINER SHOULD REJECT THE CLAIMS UNDER 35 U.S.C. 112, FIRST PARAGRAPH - WRITTEN DESCRIPTION REQUIREMENT. *IN RE RASMUSSEN*, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981)." MPEP 2163.02 teaches that "Whenever the issue arises, the fundamental factual inquiry is whether a claim defines an invention that is clearly conveyed to those skilled in the art at the time the application was filed...If a claim is amended to include subject matter, limitations, or terminology not present in the application as filed, involving a departure from, addition to, or deletion from the disclosure of the application as filed, the examiner should conclude that the claimed subject matter is not described in that application." MPEP 2163.06 further notes "WHEN AN AMENDMENT IS FILED IN REPLY TO AN OBJECTION OR REJECTION BASED ON 35 U.S.C. 112, FIRST PARAGRAPH, A STUDY OF THE ENTIRE APPLICATION IS OFTEN NECESSARY TO DETERMINE WHETHER OR NOT "NEW MATTER" IS INVOLVED. APPLICANT SHOULD THEREFORE SPECIFICALLY POINT OUT THE SUPPORT FOR ANY AMENDMENTS MADE TO THE DISCLOSURE" (emphasis added).

35 U.S.C. 112: second paragraph

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1, 3-19 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3-18 and 21 are indefinite in Claim 1 for the recitations "in a first identification step" and "in a second identification step" because it is unclear whether a method step of identification is being claimed or whether a target-specific contacting and attaching is

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being claimed.. Furthermore, if the recitations require identification, it is unclear what element is being identified. It is suggested that Claim 1 be amended to clarify as described on page 7.

Claim 19 is indefinite for the recitations "in a first identification step" and "in a second identification step" because it is unclear whether a method step of identification is being claimed or whether a target-specific contacting and attaching is being claimed.. Furthermore, if the recitations require identification, it is unclear what element is being identified. It is suggested that Claim 1 be amended to clarify as described on page 7.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1, 3-6, 10, 13-16, 18 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Whitcombe et al (WO 97/42345, published 13 November 1997).

Regarding Claim 1, Whitcombe et al disclose a method for separation of a nucleic acid of interest from a population of nucleic acids comprising: providing a population of nucleic acid molecules comprising at least one nucleic acid sequence of interest wherein said nucleic acid sequence includes a target nucleic acid sequence in the vicinity of a distinguishing element (i.e. diagnostic base); contacting said population of nucleic acid molecules with a first targeting element (i.e. diagnostic primer) in a first identification step wherein said targeting element bind specifically to said target nucleic acid sequence; selectively attaching a separation group (i.e. detector species) to said bound targeting element in a second identification step wherein attachment of said separation group is conditional on the presence of said distinguishing element in the vicinity of said bound targeting element; immobilizing (i.e. capture) said bound targeting element via attached separation group to a substrate thereby forming an immobilized targeting element-separation group complex comprising at least one nucleic acid of interest and removing said immobilized targeting element-separation group complex thereby separating said nucleic acid sequence of interest from the population of nucleic acid molecules (page 1, line 28-page 3, line 6 and Claims 1-8).

Regarding Claim 3, Whitcombe et al disclose the method wherein said targeting element binds to said at least one nucleic acid sequence of interest at a sequence within 20 nucleotides of said distinguishing element i.e. at the terminal nucleotide (page 5, lines 24-30).

Regarding Claim 4, Whitcombe et al disclose the method wherein the targeting element comprises a nucleic acid sequence i.e. diagnostic primer (page 5, lines 11-30).

Regarding Claim 5, Whitcombe et al disclose the method wherein the targeting element is an oligonucleotide i.e. diagnostic primer (page 5, lines 11-30).

Regarding Claim 6, Whitcombe et al disclose the method wherein said oligonucleotide has an extensible 3' hydroxy terminus i.e. diagnostic primer (page 5, lines 11-30).

Regarding Claim 10, Whitcombe et al disclose the method of Claim 3 wherein the targeting element is an oligonucleotide i.e. diagnostic primer (page 5, lines 11-30).

Regarding Claim 13, Whitcombe et al disclose the method of Claim 1 wherein said population of nucleic acids is a population of DNA molecules (page 9, line 30-page 10, line 2)..

Regarding Claim 14, Whitcombe et al disclose the method of Claim 13 wherein said population of DNA molecules is cDNA (page 9, line 30-page 10, line 2).

Regarding Claim 15, Whitcombe et al disclose the method of Claim 1 wherein said population of nucleic acids is a population of RNA molecules (page 9, line 30-page 10, line 2)..

Regarding Claim 16, Whitcombe et al disclose the method wherein said distinguishing element is a single nucleotide polymorphism (page 11, lines 8-12 and Fig. 5).

Regarding Claim 18, Whitcombe et al disclose the method of Claim 1 further comprising contacting said population of nucleic acid molecules with a second targeting element simultaneously with said first targeting element wherein said second targeting element binds specifically to a second at least one nucleic acid sequence of interest in said population of nucleic acid molecules; attaching a second separation group to said second bound targeting element; immobilizing said attached second separation group to a substrate thereby forming a second immobilized targeting element-separation group complex comprising said second at least one nucleic acid sequence of interest; and removing said immobilized targeting element separation group complex comprising thereby separating said second sequence of interest from said population i.e. multiplex ARMS (page 7, lines 6-20).

Regarding Claim 21, Whitcombe et al disclose the method of Claim 13 wherein said population of DNA molecules is genomic DNA i.e. native DNA extracted from cells (page 9, line 30-page 10, line 2).

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12. Claims 1, 3-15, 17, 18 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Lundeborg et al (U.S. Patent No. 6,482,592, filed 15 September 1998).

Regarding Claim 1, Lundeborg et al disclose a method for separation of a nucleic acid of interest from a population of nucleic acids comprising: providing a population of nucleic acid molecules comprising at least one nucleic acid sequence of interest wherein said nucleic acid sequence includes a target nucleic acid sequence in the vicinity of a distinguishing element (i.e. target sequence, Column 6, line 60-Column 7, line 2); contacting said population of nucleic acid molecules with a first targeting element (i.e. modular oligonucleotide) in a first identification step wherein said targeting element bind specifically to said target nucleic acid sequence; selectively attaching a separation group (i.e. modulating modules/capture module, column 7, lines 20-36) to said bound targeting element (via hybridization to the target) in a second identification step wherein attachment of said separation group is conditional on the presence of said distinguishing element in the vicinity of said bound targeting element; immobilizing said bound targeting element via attached separation group to a substrate thereby forming an immobilized targeting element-separation group complex comprising at least one nucleic acid of interest and removing said immobilized targeting element-separation group complex thereby separating said nucleic acid sequence of interest from the population of nucleic acid molecules (Column 10, lines 15-45).

Regarding Claim 3, Lundeborg et al disclose the method wherein said targeting element binds to said at least one nucleic acid sequence of interest at a sequence within 20 nucleotides of said distinguishing element i.e. at the terminal nucleotide (Column 11, lines 37-43).

Regarding Claim 4, Lundeborg et al disclose the method wherein the targeting element comprises a nucleic acid sequence (Column 5, lines 1-16).

Regarding Claim 5, Lundeborg et al disclose the method wherein the targeting element is an oligonucleotide (Column 5, lines 1-16).

Regarding Claim 6, Lundeborg et al disclose the method wherein said oligonucleotide has an extensible 3' hydroxy terminus i.e. modular primer (Column 5, lines 1-16).

Regarding Claim 7, Lundeborg et al disclose the method wherein the separation group is an immobilizable nucleotide (Column 7, lines 37-65).

Regarding Claim 8, Lundeborg et al disclose the method wherein the immobilizable nucleotide is a biotinylated nucleotide (Column 7, lines 59-65).

Regarding Claim 9, Lundeborg et al disclose the method wherein the separation group is attached to the targeting element by extending said oligonucleotide with a polymerase in the presence of a biotinylated nucleotide thereby forming an extended oligonucleotide primer containing said immobilizable nucleotide i.e. primer extension (Column 7, lines 37-65 and Column 8, lines 57-66).

Regarding Claim 10, Lundeborg et al disclose the method of Claim 3 wherein the targeting element is an oligonucleotide (Column 5, lines 1-16).

Regarding Claim 11, Lundeborg et al disclose the method of Claim 10 wherein said separation group is an immobilizable nucleotide (Column 7, lines 37-65).

Regarding Claim 12, Lundeborg et al disclose the method of Claim 10 wherein said immobilizable nucleotide is a biotinylated nucleotide (Column 7, lines 37-65).

Regarding Claim 13, Lundeborg et al disclose the method of Claim 1 wherein said population of nucleic acids is a population of DNA molecules (Column 4, lines 43-45).

Regarding Claim 14, Lundeborg et al disclose the method of Claim 13 wherein said population of DNA molecules is cDNA (Column 4, lines 43-45).

Regarding Claim 15, Lundeborg et al disclose the method of Claim 13 wherein said population of DNA molecules is RNA (Column 4, lines 43-45).

Regarding Claim 17, Lundeborg et al disclose the method wherein the substrate is a particle, bead, magnetic bead or glass surface (Column 8, lines 2-34).

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Regarding Claim 18, Lundeborg et al disclose the method of Claim 1 further comprising contacting said population of nucleic acid molecules with a second targeting element simultaneously with said first targeting element wherein said second targeting element binds specifically to a second at least one nucleic acid sequence of interest in said population of nucleic acid molecules; attaching a second separation group to said second bound targeting element; immobilizing said attached second separation group to a substrate thereby forming a second immobilized targeting element-separation group complex comprising said second at least one nucleic acid sequence of interest; and removing said immobilized targeting element separation group complex comprising thereby separating said second sequence of interest from said population i.e. multiplex (Column 19, lines 1-17; line 59-Column 20, lines 13 and Claims 1, 2 and 11).

Regarding Claim 21, Lundeborg et al disclose the method of Claim 13 wherein said population of DNA molecules is genomic DNA (Column 4, lines 43-45).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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14. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lundeborg et al (U.S. Patent No. 6,482,592, filed 15 September 1998) in view of Whitcombe et al (WO 97/42345, published 13 November 1997).

Regarding Claim 16, Lundeborg et al teach a method for separation of a nucleic acid of interest from a population of nucleic acids comprising: providing a population of nucleic acid molecules comprising at least one nucleic acid sequence of interest wherein said nucleic acid sequence includes a target nucleic acid sequence in the vicinity of a distinguishing element (i.e. target sequence, Column 6, line 60-Column 7, line 2); contacting said population of nucleic acid molecules with a first targeting element (i.e. modular oligonucleotide) in a first identification step wherein said targeting element bind specifically to said target nucleic acid sequence; selectively attaching a separation group (i.e. modulating modules/capture module, column 7, lines 20-36) to said bound targeting element (via hybridization to the target) in a second identification step wherein attachment of said separation group is conditional on the presence of said distinguishing element in the vicinity of said bound targeting element; immobilizing said bound targeting element via attached separation group to a substrate thereby forming an immobilized targeting element-separation group complex comprising at least one nucleic acid of interest and removing said immobilized targeting element-separation group complex thereby separating said nucleic acid sequence of interest from the population of nucleic acid molecules (Column 10, lines 15-45) wherein the method separates the nucleic acid target of interest from a population (Column 10, lines 15-45) but they do not teach the target of interest is a single nucleotide polymorphism. However single nucleotide polymorphic targets of interest and the separation thereof were well known in the art at the time the claimed invention was made as taught by Whitcombe et al.

Whitcombe et al teach a similar method for separation of a nucleic acid of interest from a population of nucleic acids comprising: providing a population of nucleic acid molecules comprising at least one nucleic acid sequence of interest including a target nucleic acid

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sequence in the vicinity of a distinguishing element (i.e. diagnostic base); contacting said population of nucleic acid molecules with a first targeting element (i.e. diagnostic primer); selectively attaching a separation group (i.e. detector species) to said bound targeting; immobilizing (i.e. capture) said bound targeting element via attached separation group to a substrate thereby forming an immobilized targeting element-separation group complex comprising at least one nucleic acid of interest and removing said immobilized targeting element-separation group complex thereby separating said nucleic acid sequence of interest from the population of nucleic acid molecules (page 1, line 28-page 3, line 6 and Claims 1-8) wherein the method effectively separates a single nucleotide polymorphic distinguishing element (page 11, lines 8-12 and Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the separation of a target nucleic acid taught by Lundeberg et al by separating a polymorphic target as taught by Whitcombe et al to thereby separate clinically important polymorphic sequences (e.g. Insulin gene as taught by Whitcombe et al, page 11, lines 8-12) with improved sensitivity of Lundeberg et al (Abstract) for the obvious benefits of increased sensitivity in diagnosing clinically important targets.

15. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lundeberg et al (U.S. Patent No. 6,482,592, filed 15 September 1998).

Regarding Claim 19, Lundeberg et al teach a method for separation of a nucleic acid of interest from a population of nucleic acids comprising: providing a population of nucleic acid molecules comprising at least one nucleic acid sequence of interest wherein said nucleic acid sequence includes a target nucleic acid sequence in the vicinity of a distinguishing element (i.e.

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target sequence, Column 6, line 60-Column 7, line 2); contacting said population of nucleic acid molecules with a first targeting element (i.e. modular oligonucleotide) in a first identification step wherein said targeting element bind specifically to said target nucleic acid sequence; selectively attaching a separation group (i.e. modulating modules/capture module, column 7, lines 20-36) to said bound targeting element (via hybridization to the target) in a second identification step wherein attachment of said separation group is conditional on the presence of said distinguishing element in the vicinity of said bound targeting element; immobilizing said bound targeting element via attached separation group to a substrate thereby forming an immobilized targeting element-separation group complex comprising at least one nucleic acid of interest and removing said immobilized targeting element-separation group complex thereby separating said nucleic acid sequence of interest from the population of nucleic acid molecules (Column 10, lines 15-45). Lundeborg et al teach the method further comprises selectively removing separation groups wherein the removal is conditional on the absence of the distinguishing element (Column 10, lines 48-54) but they are silent regarding removal prior to immobilization.

The courts have stated that wherein the process steps are known, absent unexpected results, the rearrangement of the process steps is prima facie obvious (see *In re Burhans* 154, F.2d 690, 69 USPQ 330 (CCPA 1946). Therefore, in view of the selective removal of separation groups taught by Lundeborg et al would have been obvious to one of ordinary skill in the art to remove the separation groups prior to immobilization based on Lundeborg's desired removal of the separation groups.

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Response to Applicant's Comments

16. Applicant's arguments in Paper No. 9 regarding the previous rejections have been considered but are deemed moot in view of the amendments, withdrawn rejections and new grounds for rejection.

17. Applicant's comments on pages 3-5 of Paper No. 15 are acknowledged. On page 4, first full paragraph, Applicant states that Claim 1 requires two identification steps. Claims 1 and 19 recite method steps of providing a population of nucleic acid molecules; contacting said population with a first targeting element; selectively attaching a separation group; immobilizing bound targeting element; and removing immobilized targeting element. While Claims 1 and 19 recite "in a first identification step" and "in a second identification step" the claims do not recite identifying means and/or identifying methods. Additionally, the claims do not recite what is identified e.g. target, targeting element, label, location. Therefore, Applicant's assertion that the claims require two identification steps describes limitations not recited in the claims.

On page 4, Applicant further describes specific embodiments of the claimed invention as described in the specification. The description is acknowledged. However, the claims are not limited to the embodiments described. Specifically, the claims are not limited to an oligonucleotide designed so that it anneals adjacent to the location of the SNP in the target; biotinylated nucleotide is incorporated.....if complementary to a SNP of interest. Therefore, the comments do not address limitations of the claims.

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18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

19. No claim is allowed.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BJ Forman whose telephone number is (703) 306-5878. The examiner can normally be reached on 6:30 TO 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached on (703) 308-1152. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-8724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.



BJ Forman, Ph.D.
Patent Examiner
Art Unit: 1634
December 9, 2002